

REMARKS

Claims 1 and 13 have been amended as suggested by the Examiner to correct minor informalities. Claims 16 and 17 have been redrafted to depend from claim 1, in part to address the minor informalities noted by the Examiner.

Claims 2, 7-9, 13 and 15 were rejected under 35 USC 112. By this amendment, all of these claims have been changed in accordance with the Examiner's suggestions. These objections should now be overcome.

Claims 1, 2, 7-9, 13 and 15-17 have been further amended in order to clarify and set forth the appropriate scope of the invention described in the present application. Claim 1 is the only independent claim in this case.

Claims 1, 2, 9, 13 and 15-17 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 4,488,785 by Kohashi in view of U.S. Patent No. 6,525,866 by Lin et al. (hereinafter "Lin") and in view of U.S. Patent No. 7,119,161 by Lawandy et al (hereinafter "Lawandy").

The Examiner asserts that Kohashi discloses "a discrete drop of liquid". Applicants respectfully disagree. Kohashi discloses a continuous liquid 20 that impregnates the porous member 10 and is supplied through space 101 (column 2, lines 33 – 35). In the rejection, the Examiner points to what he suggests is a discrete drop of liquid, but Applicants find no support in Kohashi for the Examiner's assertion, and there would be no suggestion to one skilled in the art that the Examiner's arbitrary circled area is equivalent to a discrete drop of liquid.

Applicants agree with the Examiner's statement that "Kohashi does not teach the layer comprising a plurality of conductive particles covered with a lyophobic and electrically insulating covering." In fact, Kohashi's porous member is a dielectric material such as cellulose acetate (column 2, lines 25 – 30). Kohashi does not provide any teaching that its porous member should include conductive particles, a lyophobic covering or an electrically insulating covering, let alone the combination of all three.

The Examiner states that "Lin teaches the concept of including a plurality of conductive particles [col. 2 lines 34-38] in a layer of a display [col. 2 lines 26-38]." Lin is directed to electrophoretic displays that are fundamentally different than the present invention, which is a type of electrowetting display. In Lin, conductive particles are provided within an electrophoretic display liquid and

the conductive particles move within the liquid cell in response to an applied voltage. In the claimed invention, a liquid moves in and out of a porous layer of conductive particles in response to a voltage; the particles do not move into and out of the liquid. The physics are entirely different. Although one skilled in the art would not consider combining Lin with Kohashi, if such combination were made, it would nevertheless not resemble anything even remotely similar to the present invention.

With respect to the lyophobic and electrically insulating covering of the present invention, the Examiner states that Kohashi as modified by Lin fails to teach this. Applicants agree. The Examiner further states that “it is well known in the art to cover particles with a polymer to prevent the particles from coagulation”. The Examiner cites no reference. Even assuming for the moment that this statement is relevant, the combination of Lin and Kohashi (discussed above) and this last assertion still fails to teach the present invention. The Examiner’s observation, however, is off point in any event. Applicants are not claiming a material to prevent particles from coagulation, but rather, a lyophobic and electrically insulating covering necessary to enable the display element to work. Any polymer will not do. When choosing materials for their lyophobic and electrically insulating properties, one skilled in the art would not assume that polymers used as anti-coagulants would be useful.

The Examiner cites Lawandy in that “Lawandy teaches the concept of forming a conductive particle by covering organic or inorganic particle with a conductive shell...”. However, this claim feature has been removed from claim 1, and the Examiner’s observation is no longer relevant. Lawandy teaches an LCD pixel or an ink that includes a liquid crystal material and one or more of an anisotropic nanoparticle and an anisotropic nanostructure. It is alleged that these anisotropic nanoparticles and structures improve viewing angle and contrast of an LCD display. The problems solved and the structures proposed in Lawandy have no relevance to the present invention. By combining Kohashi, Lin and Lawandy, one still cannot arrive at the subject matter of claim 1.

The subject matter of claim 1 sets forth novel subject matter and is not obvious by any combination of the cited references for the reasons described above. Claims 2, 9, 15, 16 and 17, which all depend from claim 1, should also be

allowed along with claim, so the Examiner's specific comments regarding these patents need not be addressed here.


Claims 7 and 8 were rejected under 35 USC 103(a) as being unpatentable over Kohashi, Lin and Lawandy as applied to claims 1, 2, 9 and 13 above, and further in view of Steckl et al (U.S. Patent 7,123,796, hereinafter "Steckl").

Kohashi, Lin and Lawandy are discussed above. Steckl relates to an emissive display having a specular waveguide to enable certain optical characteristics. Applicants agree with the Examiner that "Kohashi as modified by Lin and Lawandy does not expressly teach that the drop of liquid is encapsulated by a flexible and transparent membrane." Applicants fail to find any disclosure in Steckl that specifically teaches that scattering layer 26 acts also as an encapsulation layer. The point is moot, however, as claims 7 and 8 depend from claim 1, which is believed to be patentable. Thus, claims 7 and 8 are also allowable.

In view of the foregoing, it is believed that claim 1 is not disclosed or suggested by any of the cited references taken singly or in combination. Claim 1 defines unobvious subject matter and it along with its dependent claims should be allowed.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes or Applicants' positions, Applicants' attorney would appreciate a telephone call.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.